

USSN 10/606,990
Amendment A
June 28, 2004
Page 2 of 13

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A center conductor assembly comprising;
an insulator including portions defining an opening therethrough;
an inner conductor comprising a first end configured to be electrically coupled to a center conductor of a transmission line, at least a portion of said inner conductor being disposed in said opening; and
a center contact having a first end configured to mate with a mating center contact, and a second end for electrically connecting with a second end of said inner conductor, and at least one spur adjacent extending axially from an end surface at said second end of said center contact, said at least one spur engaging said insulator thereby resisting rotational movement of said center contact relative to said insulator.
2. (Original) The center conductor assembly according to claim 1 wherein said insulator comprises anti-rotational feature around at least a portion of a circumference of said insulator.
3. (Cancelled)

USSN 10/606,990
Amendment A
June 28, 2004
Page 3 of 13

4. (Currently Amended) The center conductor assembly according to claim 1 wherein said at least one spur comprises a generally triangular projection ~~extending from said second end of said center contact~~.

5. (Currently Amended) The center conductor assembly according to claim 1 comprising a plurality of said spurs adjacent ~~said second end of said center contact~~.

6. (Original) The center conductor assembly according to claim 1 wherein said first end of said inner conductor comprises a receptacle dimensioned to receive a center conductor of said transmission line.

7. (Original) The center conductor assembly according to claim 1 wherein said first end of said center contact comprises one of a plug and a receptacle.

8. (Currently amended) The center conductor assembly according to claim 1 wherein said second end of said center contact comprises and an opening dimensioned to receive at least a portion of the second end of said inner conductor.

9. (Original) An electrical connector for a coaxial cable, said connector comprising:
a body including a mating connector end configured to mate with a mating connector and a cable connection end having a cable opening therein for receiving at least a portion of said cable;

USSN 10/606,990
Amendment A
June 28, 2004
Page 4 of 13

an insulator disposed in said body, said insulator defining a generally centrally located opening therethrough, and said insulator comprising an anti-rotational feature about at least a portion of a circumference of said insulator configured to engage said body to resist rotational movement of the insulator relative to the body;

an inner conductor extending at least partially into said opening, a first end of said inner conductor being adjacent said cable connection end of said body and being configured to electrically couple with a center conductor of the coaxial cable, and a second end including a post adjacent to said mating connector end; and

a center contact including a first end configured to contact a center contact of a mating connector, a second end including an opening dimensioned to receive said post of said inner conductor, and at least one spur projecting adjacent said second end, said spur engaging said insulator thereby resisting rotational movement of said center contact relative to said insulator.

10. (Original) The electrical connector according to claim 9 wherein said first end of said inner conductor comprises a receptacle configured to receive at least a portion of the center conductor of the coaxial cable.

11. (Original) The electrical connector according to claim 9 wherein said first end of said center contact comprises one of a receptacle and a plug.

USSN 10/606,990
Amendment A
June 28, 2004
Page 5 of 13

12. (Original) The electrical connector according to claim 9, wherein said connector exhibits a voltage standing wave ratio of less than 1.25 over at least a portion of the operating frequency range of said connector.

13. (Original) The electrical connector according to claim 9, wherein said connector exhibits a voltage standing wave ratio of less than 1.15 over a frequency range from 0.5 GHz to 5 GHz.

14. (Original) The electrical connector according to claim 9, wherein said connector exhibits a voltage standing wave ratio of less than 1.25 over a frequency range from 5 GHz to 7.5 GHz.

15. (Currently amended) A method of making an electrical connector comprising:
providing an insulator having an opening therein;
providing an inner conductor having a first end configured to mate with a center conductor of a transmission line;
providing a center contact having a first end configured to mate with a mating center contact of a mating connector, a second end configured to electrically contact a second end of said inner conductor, and at least one spur extending axially from an end surface of said center contact adjacent at said second end;
inserting at least a portion of a second end of said inner conductor in said opening; and

USSN 10/606,990
Amendment A
June 28, 2004
Page 6 of 13

electrically connecting said second end of said center contact with said second end of said inner conductor with said at least one spur engaging said insulator for thereby resisting rotational movement of said center contact relative to said insulator.

16. (Original) The method according to claim 15 wherein electrically connecting said second end of said center contact with said second end of said inner conductor comprises inserting a post portion of said second end of said inner conductor into an opening in said second end of said center contact.

17. (Currently Amended) The method according to claim 15 wherein said center contact comprises a plurality of said spurs extending from said center contact adjacent said second end.

18. (Original) The method according to claim 15 wherein said first end of said center contact comprises one of a plug and a receptacle configured to mate with a center contact of a mating connector.

19. (Original) The method according to claim 15 wherein said first end of said inner conductor comprises a receptacle configured to receive at least a portion of said center conductor of said transmission line.

USSN 10/606,990
Amendment A
June 28, 2004
Page 7 of 13

20. (Original) The method according to claim 15 wherein electrically connecting said second end of said center contact with said second end of said inner conductor comprises soldering.

21. (Original) The method according to claim 15 further comprising inserting said insulator in a connector body configured to mate with a mating connector.

22. (Original) The method according to claim 21 wherein said insulator comprises an anti-rotational surface about at least a portion of a circumference thereof to resist rotational movement relative to said connector body.